

Cardiac risk stratification in elective non-cardiac surgery: role of NT-proBNP.

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Abstract

AIM:

The aim of the study was to investigate the utility of NT-proBNP measurement for the stratification of presurgical cardiac risk.

METHODS:

Cardiac risk before elective non-cardiac surgery was evaluated in 82 consecutive patients. From each patient a venous blood sample was drawn to determinate NT-proBNP levels. Patients were followed up over three months in order to detect the occurrence of cardiac adverse events.

RESULTS:

NT-proBNP was positively correlated ($P<0.0001$) with age, days of hospitalization ($P=0.001$) and ASA class ($P=0.001$). High surgical risk ($P<0.0001$), diabetes ($P=0.004$), dyslipidemia ($P=0.006$) and elevated levels of NT-proBNP ($P<0.0001$) were significantly correlated with events. Using a logistic regression analysis we found an independent association between pre-operative elevated NT-proBNP and postoperative cardiac events (OR 1.2, 95% CI 1.0-1.4, $P=0.01$).

CONCLUSION:

Measuring NT-proBNP before non cardiac surgery in clinical practice could be useful to better stratify patients' risk.